

December 23, 2015

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Richland

2800 George Washington Way

Richland, WA 99352

Tel: (509)375-3131

TestAmerica Job ID: 300-1854-1

TestAmerica Sample Delivery Group: WC0714

Client Project/Site: X15-070

For:

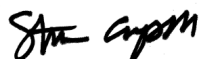
CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

12/23/2015 9:48:51 AM

Steven Campbell, Quality Assurance Assistant

[steven.campbell@testamericainc.com](mailto:steven.campbell@testamericainc.com)

Designee for

Whitney Ritari, Project Manager I

(509)375-3131 ext164

[whitney.ritari@testamericainc.com](mailto:whitney.ritari@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this package. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the attached signature.*

*The laboratory is accredited to EPA 7196A in Solid and Chemical Materials, per Washington State Department of Ecology this is approved for non-discharge water samples. The sample/ sample duplicate RPD agreement is not applicable if one or both results are less than five times the MDL.*

December 23, 2015

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Chain of Custody . . . . .	5
Detection Summary . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	12
Lab Chronicle . . . . .	13
Method Summary . . . . .	15
Sample Summary . . . . .	16
Receipt Checklists . . . . .	17



Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
U	Analyzed for but not detected.
B	Estimated result. Result is less than the RL, but greater than MDL

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

December 23, 2015

## Case Narrative

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

**Job ID: 300-1854-1**

**Laboratory: TestAmerica Richland**

### Narrative

#### Job Narrative 300-1854-1

### Comments

No additional comments.

### Receipt

The samples were received on 12/15/2015 1:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 12.4° C.

### HPLC/IC

Method 300.0: The following samples required filtration to reduce matrix interferences and solids: B339P2 (300-1854-1), B339P6 (300-1854-2) and B339K6 (300-1854-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# CH2M Hill Plateau Remediation Company

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

X15-070-029

Page 1 of 1

Collector	D.L. Floyd/CHPRC			Contact/Requester	WHITLEY, KM		Telephone No.	373-4929	
SAF No.	X15-070			Sampling Origin	Hanford Site		Purchase Order/Charge Code	300205	
Project Title	300 Area Uranium Sequestration Post Inj			Logbook No.	HNF-N-506 84 / 61		Ice Chest No.	N/A	
Shipped To (Lab)	TestAmerica Incorporated, Richland			Method of Shipment	GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.	N/A	
Protocol	CERCLA			Priority:	30 Days		Offsite Property No.	N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS				SPECIAL INSTRUCTIONS		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.									
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative	
B339P2	N		DEC 15 2015	1326	1x500-mL P	300.0_ANIONS_IC: COMMON; 300.0_ANIONS_IC: GW 01	48 Hours	Cool <=6C	



300-1854 COC

WC0714  
#1854

December 23, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
D.L. Floyd/CHPRC			DEC 15 2015	Bob J. Fox			DEC 15 2015	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By				Received By				DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By				Received By				
Relinquished By				Received By				
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time

PRINTED ON 10/1/2015

FSR ID = FSR7393

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

X15-070-037

Page 1 of 1

Collector	DL Foyd/CHPRC	Contact/Requester	WHITLEY, KM	Telephone No.	373-4929
SAF No.	X15-070	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300205
Project Title	300 Area Uranium Sequestration Post Inj	Logbook No.	HNF-N-506 <u>86161</u>	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS			SPECIAL INSTRUCTIONS		
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.			Hold Time		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Sample No.	Filter	*	Date	Time	No./Type Container
B339F6	N	W	DEC 15 2015	1250	1x500-mL P
			Sample Analysis		
			300.0_ANIONS_IC: COMMON; 300.0_ANIONS_IC: GW 01		
			Holding Time		
			48 Hours		
			Preservative		
			Cool <=6C		

December 23, 2015

Relinquished By	Print DL Foyd/CHPRC	Sign	Date/Time DEC 15 2015 1350	Received By	Print Jed S. Bick TATL	Sign	Date/Time DEC 15 2015 1350	Matrix *
Relinquished By				Received By				S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By				Received By				DS = Drum Solids DL = Drum Liquids T = Tissue WL = Wipe L = Liquid V = Vegetation X = Other
Relinquished By				Received By				
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

W 0714  
11854



December 23, 2015

## Detection Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

## Client Sample ID: B339P2

## Lab Sample ID: 300-1854-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20	D	20	10	mg/L	100		300.0	Total/NA
Nitrate as N	5.6	D	2.8	1.4	mg/L	100		300.0	Total/NA
Orthophosphate as P	500	D	8.2	4.1	mg/L	100		300.0	Total/NA
Sulfate	41	D	25	13	mg/L	100		300.0	Total/NA

## Client Sample ID: B339P6

## Lab Sample ID: 300-1854-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	6.3	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	1.4	D	0.10	0.050	mg/L	2		300.0	Total/NA
Orthophosphate as P	11	D	0.16	0.082	mg/L	2		300.0	Total/NA
Sulfate	55	D	0.50	0.25	mg/L	2		300.0	Total/NA

## Client Sample ID: B339K6

## Lab Sample ID: 300-1854-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	19	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	6.1	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.29	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	61	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland



December 23, 2015

## Client Sample Results

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

Client Sample ID: B339P2

Date Collected: 12/15/15 13:26

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-1

Matrix: Water

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20	D	20	10	mg/L			12/16/15 02:47	100
Nitrate as N	5.6	D	2.8	1.4	mg/L			12/16/15 02:47	100
Fluoride	2.5	U	5.0	2.5	mg/L			12/16/15 02:47	100
Nitrite as N	1.9	U	3.8	1.9	mg/L			12/16/15 02:47	100
Orthophosphate as P	500	D	8.2	4.1	mg/L			12/16/15 02:47	100
Sulfate	41	D	25	13	mg/L			12/16/15 02:47	100

Client Sample ID: B339P6

Date Collected: 12/15/15 12:50

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-2

Matrix: Water

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25	D	0.40	0.20	mg/L			12/16/15 03:02	2
Nitrate as N	6.3	D	0.056	0.028	mg/L			12/16/15 03:02	2
Fluoride	1.4	D	0.10	0.050	mg/L			12/16/15 03:02	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			12/16/15 03:02	2
Orthophosphate as P	11	D	0.16	0.082	mg/L			12/16/15 03:02	2
Sulfate	55	D	0.50	0.25	mg/L			12/16/15 03:02	2

Client Sample ID: B339K6

Date Collected: 12/15/15 11:52

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-3

Matrix: Water

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19	D	0.40	0.20	mg/L			12/16/15 03:17	2
Nitrate as N	6.1	D	0.056	0.028	mg/L			12/16/15 03:17	2
Fluoride	0.29	D	0.10	0.050	mg/L			12/16/15 03:17	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			12/16/15 03:17	2
Orthophosphate as P	0.082	U	0.16	0.082	mg/L			12/16/15 03:17	2
Sulfate	61	D	0.50	0.25	mg/L			12/16/15 03:17	2

TestAmerica Richland

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-2375/46

Matrix: Water

Analysis Batch: 2375

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.014	U	0.028	0.014	mg/L			12/16/15 01:02	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			12/16/15 01:02	1
Orthophosphate as P	0.041	U	0.082	0.041	mg/L			12/16/15 01:02	1

Lab Sample ID: LCS 300-2375/47

Matrix: Water

Analysis Batch: 2375

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.26	2.40		mg/L		106	80 - 120
Nitrite as N	3.04	3.25		mg/L		107	80 - 120
Orthophosphate as P	6.53	6.95		mg/L		107	80 - 120

Lab Sample ID: 300-1856-A-1 MS

Matrix: Water

Analysis Batch: 2375

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.13	D	0.452	0.570	D	mg/L		96	75 - 125
Nitrite as N	0.038	U	0.609	0.589	D	mg/L		97	75 - 125
Orthophosphate as P	0.082	U	1.31	1.21	D	mg/L		93	75 - 125

Lab Sample ID: 300-1856-A-1 DU

Matrix: Water

Analysis Batch: 2375

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.13	D	0.134	D	mg/L		0.4	20
Nitrite as N	0.038	U	0.038	U	mg/L		NC	20
Orthophosphate as P	0.082	U	0.082	U	mg/L		NC	20

Lab Sample ID: MB 300-2376/46

Matrix: Water

Analysis Batch: 2376

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.10	U	0.20	0.10	mg/L			12/16/15 01:02	1
Fluoride	0.025	U	0.050	0.025	mg/L			12/16/15 01:02	1
Sulfate	0.13	U	0.25	0.13	mg/L			12/16/15 01:02	1

Lab Sample ID: LCS 300-2376/47

Matrix: Water

Analysis Batch: 2376

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.0	16.7		mg/L		105	80 - 120
Fluoride	4.00	4.22		mg/L		105	80 - 120
Sulfate	20.0	21.1		mg/L		106	80 - 120

December 23, 2015

## QC Sample Results

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-1856-A-1 MS

Matrix: Water

Analysis Batch: 2376

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.1	D	3.20	4.36	D	mg/L		102	75 - 125
Fluoride	0.089	B D	0.800	0.856	D	mg/L		96	75 - 125
Sulfate	9.7	D	4.00	14.1	D	mg/L		110	75 - 125

Lab Sample ID: 300-1856-A-1 DU

Matrix: Water

Analysis Batch: 2376

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.1	D	1.08	D	mg/L		0.08	20
Fluoride	0.089	B D	0.0890	B D	mg/L		0.2	20
Sulfate	9.7	D	9.69	D	mg/L		0.3	20

TestAmerica Richland

December 23, 2015

## QC Association Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

## HPLC/IC

## Analysis Batch: 2375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1854-1	B339P2	Total/NA	Water	300.0	
300-1854-2	B339P6	Total/NA	Water	300.0	
300-1854-3	B339K6	Total/NA	Water	300.0	
300-1856-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1856-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
LCS 300-2375/47	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2375/46	Method Blank	Total/NA	Water	300.0	

## Analysis Batch: 2376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1854-1	B339P2	Total/NA	Water	300.0	
300-1854-2	B339P6	Total/NA	Water	300.0	
300-1854-3	B339K6	Total/NA	Water	300.0	
300-1856-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1856-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
LCS 300-2376/47	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2376/46	Method Blank	Total/NA	Water	300.0	

TestAmerica Richland

December 23, 2015

## Lab Chronicle

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

Client Sample ID: B339P2

Date Collected: 12/15/15 13:26

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	10 mL		2375	12/16/15 02:47	CPM	TAL RCH
Total/NA	Analysis	300.0		100	10 mL		2376	12/16/15 02:47	CPM	TAL RCH

Client Sample ID: B339P6

Date Collected: 12/15/15 12:50

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		2375	12/16/15 03:02	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2376	12/16/15 03:02	CPM	TAL RCH

Client Sample ID: B339K6

Date Collected: 12/15/15 11:52

Date Received: 12/15/15 13:50

Lab Sample ID: 300-1854-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		2375	12/16/15 03:17	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2376	12/16/15 03:17	CPM	TAL RCH

Client Sample ID: Duplicate

Date Collected: 12/15/15 09:50

Date Received: 12/15/15 14:15

Lab Sample ID: 300-1856-A-1 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		2375	12/16/15 02:02	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2376	12/16/15 02:02	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 300-2375/47

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		2375	12/16/15 01:17	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 300-2376/47

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		2376	12/16/15 01:17	CPM	TAL RCH

TestAmerica Richland

December 23, 2015

## Lab Chronicle

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

**Client Sample ID: Method Blank****Lab Sample ID: MB 300-2375/46****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		2375	12/16/15 01:02	CPM	TAL RCH

**Client Sample ID: Method Blank****Lab Sample ID: MB 300-2376/46****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		2376	12/16/15 01:02	CPM	TAL RCH

**Client Sample ID: Matrix Spike****Lab Sample ID: 300-1856-A-1 MS****Date Collected: 12/15/15 09:50****Matrix: Water****Date Received: 12/15/15 14:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		2375	12/16/15 01:47	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2376	12/16/15 01:47	CPM	TAL RCH

**Laboratory References:**

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

TestAmerica Richland

December 23, 2015

## Method Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL RCH

**Protocol References:**

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

**Laboratory References:**

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

December 23, 2015

## Sample Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X15-070

TestAmerica Job ID: 300-1854-1  
SDG: WC0714

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1854-1	B339P2	Water	12/15/15 13:26	12/15/15 13:50
300-1854-2	B339P6	Water	12/15/15 12:50	12/15/15 13:50
300-1854-3	B339K6	Water	12/15/15 11:52	12/15/15 13:50

TestAmerica Richland



## Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1854-1

SDG Number: WC0714

Login Number: 1854

List Number: 1

Creator: Friesz, Jordan D

List Source: TestAmerica Richland

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	